

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: METALUX

Report Number: P292231

Luminaire Tested: **22GR-LD5-24-A-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292231
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-A-UNV-L93050-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2272.0 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

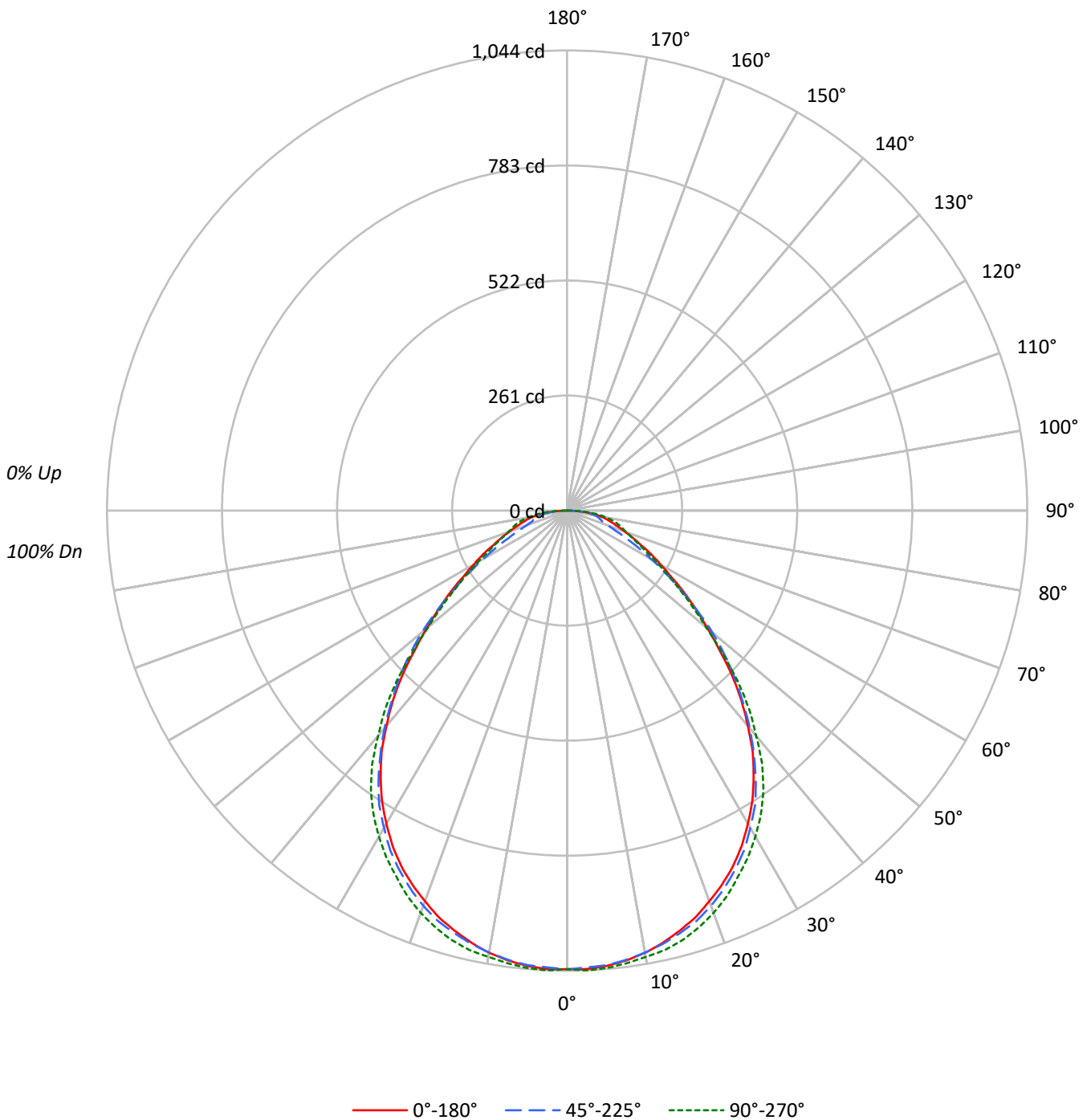
Input Watts (W): 18.879
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2800	2800	2800
5°	2801	2796	2814
10°	2784	2782	2810
15°	2749	2763	2812
20°	2701	2733	2781
25°	2643	2673	2722
30°	2548	2582	2653
35°	2423	2451	2550
40°	2240	2264	2344
45°	2012	2048	2081
50°	1740	1802	1722
55°	1518	1478	1459
60°	1315	1183	1263
65°	1175	929	1135
70°	1090	769	1119
75°	1089	813	1242
80°	1204	1024	1401
85°	1257	1112	1584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	4.3
10°-20°	280.4	12.3
20°-30°	414.8	18.3
30°-40°	468.0	20.6
40°-50°	412.6	18.2
50°-60°	283.0	12.5
60°-70°	167.0	7.4
70°-80°	104.2	4.6
80°-90°	43.5	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	793.7	34.9
0°-40°	1261.7	55.5
0°-60°	1957.3	86.1
0°-90°	2272.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2272.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1037	1035	1035	1039	1042	98
15°	987	988	992	1004	1009	278
25°	890	894	900	912	917	409
35°	738	744	746	764	776	460
45°	529	531	538	541	547	406
55°	324	316	315	304	311	290
65°	184	162	146	169	178	186
75°	105	94	78	109	120	112
85°	41	38	36	47	51	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1040.5	1040.5	1040.5	1040.5	1040.5
2.5°	1041.0	1038.4	1037.3	1041.6	1044.2
5°	1036.8	1034.7	1035.2	1038.9	1041.6
7.5°	1029.4	1027.8	1027.8	1033.1	1035.7
10°	1018.8	1018.3	1018.3	1024.6	1028.3
12.5°	1004.0	1004.5	1006.7	1015.1	1021.5
15°	986.6	987.6	991.9	1004.0	1009.3
17.5°	967.5	967.5	976.0	985.5	991.9
20°	943.2	944.8	954.3	964.9	971.2
22.5°	918.4	921.0	928.9	941.1	946.9
25°	890.3	893.5	900.4	912.0	916.8
27.5°	857.6	861.8	869.2	877.7	887.7
30°	820.0	826.4	831.1	842.8	853.9
32.5°	782.0	787.8	793.1	805.2	817.9
35°	737.5	743.9	746.0	764.0	776.1
37.5°	692.1	694.7	695.8	713.8	727.0
40°	637.6	642.9	644.5	658.8	667.2
42.5°	585.3	587.4	590.6	601.1	611.2
45°	528.7	531.3	538.2	541.4	546.7
47.5°	469.5	477.4	485.4	475.3	475.8
50°	415.6	421.9	430.4	411.3	411.3
52.5°	367.5	370.6	371.2	355.3	358.5
55°	323.6	315.6	315.1	304.5	310.9
57.5°	279.7	269.1	265.4	262.2	269.6
60°	244.3	225.2	219.9	224.7	234.7
62.5°	215.2	190.9	180.8	193.0	202.0
65°	184.5	162.3	145.9	168.7	178.2
67.5°	160.7	139.6	118.4	150.7	157.6
70°	138.5	122.1	97.8	136.9	142.2
72.5°	120.5	107.9	84.6	123.7	130.1
75°	104.7	94.1	78.2	109.4	119.5
77.5°	92.0	80.4	73.0	94.6	106.8
80°	77.7	66.1	66.1	79.3	90.4
82.5°	61.3	51.8	53.4	64.5	72.4
85°	40.7	38.1	36.0	47.1	51.3
87.5°	20.6	21.1	19.0	24.3	24.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)